



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/068,592	05/14/1998	KOICHI MORITA	XIP5934USO	2471

881 7590 02/11/2002

LARSON & TAYLOR, PLC  
1199 NORTH FAIRFAX STREET  
SUITE 900  
ALEXANDRIA, VA 22314

EXAMINER

DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 02/11/2002

24

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/068,592

Applicant(s)  
Morita

Examiner  
Tracy Dove

Art Unit  
1745



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 15, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 7, 9-12, 23, 27, 38, 39, and 41-43 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7, 9-12, 23, 27, 38, 39, and 41-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

Art Unit: 1745

### **DETAILED ACTION**

This Office Action is in response to the communication filed on 11/15/01. Applicant's arguments have been considered, but are not persuasive. Claims 1, 3-5, 7, 9-12, 23, 27, 38, 39 and 41-43 are rejected in view of the prior art of record. Claims 2, 6, 8, 13-22, 24-26, 28-37 and 40 are canceled. This Action is made **FINAL**.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7, 9-12, 23, 38, 39 and 41-43 are rejected under 35 U.S.C. 102(b)/103(a) as being anticipated by, and alternatively unpatentable over, Miyabayashi et al., US 5,401,598.

Art Unit: 1745

See Office Action of 5/15/01 for the reasons for rejection.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyabayashi et al., US 5,401,598.

See Office Action of 5/15/01 for the reasons for rejection.

### ***Response to Arguments***

Applicant's arguments filed 11/15/01 have been fully considered but they are not persuasive.

Applicant argues "Miyabayashi merely relates to generating a coated carbon material in which particles were lightly pulverized. This is totally different than the pulverization of particles in the present invention which leads to particles which are (I) nearly all spherical or ellipsoidal and (ii) where the volume-based integrated value of particles having a diameter of 1  $\mu\text{m}$  or less determined by particle size distribution is 10 % or less". Note independent claims 7 and 41-43 do not contain the limitation "(ii)" above.

Examiner points out the claims state "the carbon material being *nearly* spherical or ellipsoidal", which is interpreted broadly. Furthermore, Miyabayashi teaches the carbonaceous material may have any desired shape such as granular (nearly spherical) or fibrous (nearly ellipsoidal). See col. 6, lines 18-29. See also Figure 1 which shows a nearly spherical particle. Examiner further notes that the claims state "particles having a diameter of 1  $\mu\text{m}$  or less ... is 10%

Art Unit: 1745

or less". Miyabayashi teaches the granular carbon material has a volume average particle size that is 200  $\mu\text{m}$  or less, most preferably 2 to 20  $\mu\text{m}$ . Since the claimed range of particles having a diameter of 1  $\mu\text{m}$  or less is 10% or less, this limitation is disclosed by Miyabayashi. Note claim 16 of Miyabayashi recites "the carbonaceous material is particulate and has a volume average particle size of 200  $\mu\text{m}$ ".

Applicant's arguments seem to be contradictory. On page 2, third paragraph, Applicant argues Miyabayashi does not teach the claimed invention because the particles are lightly pulverized and points out Example 4 of the reference. Then on page 3, first paragraph, Applicant argues Miyabayashi does not teach the claimed invention because more than 10% of the particles have a diameter of 1  $\mu\text{m}$  or less. However, the "light pulverization" of Example 4 results in an average particle size of 24  $\mu\text{m}$ .

Furthermore, Miyabayashi does not even appear teach more than 10% of the carbon particles have a diameter of 1  $\mu\text{m}$  or less. Example 1 teaches the carbon particles have an average particle size of 5  $\mu\text{m}$  and as noted above the carbon particles have a volume average particle size that is 200  $\mu\text{m}$  or less, most preferably 2 to 20  $\mu\text{m}$ .

Regarding the arguments concerning the pulverization method, note that claims 1, 3-5, 7, 9-12, 38 and 39 are directed to a product and claims 23, 27 and 41-43 are directed to a method, however none of the claims contain limitations regarding pulverization of the carbon particles.

Examiner requests that Applicant identify those sections of the Miyabayashi reference that teach 1) the carbon particles are the result of pulverization of fused and aggregated carbon

Art Unit: 1745

material, 2) the carbon particles have flat or uneven surfaces and angular edges, and 3) the carbon particles have a diameter of 1  $\mu\text{m}$  or less.

Examiner submits that the rejection of claim 27 is not in error and is maintained. See arguments above.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is (703) 308-8821. The Examiner may normally be reached Monday-Thursday (9:00 AM-7:30 PM). My supervisor is Gabrielle


Application/Control Number: 09/068,592

Page 6

Art Unit: 1745

Brouillette, who can be reached at (703) 308-0756. The Art Unit receptionist can be reached at (703) 308-0661 and the official fax number is (703) 305-5433.

February 4, 2002

  
**CAROL CHANEY**  
**PRIMARY EXAMINER**